

REMARKS

This Submission is responsive to the Office Action mailed October 19, 2010. Claims 1-3 and 5-25 are pending in the application.

Claims 1 and 10 have been amended to recite that the immobilized molecules or molecule classes are arranged on the surfaces to form symbols. Support for this amendment can be found throughout the specification and in particular at page 11, first paragraph, and page 14, second and third paragraphs.

REJECTION UNDER 35 USC 112 (second paragraph)

At page 2 of the Office Action, the Examiner rejected claims 1 and 10 under 35 USC 112, second paragraph as indefinite. The Examiner alleged that claims 1 and 10 are indefinite because it is unclear how the surfaces of the device are represented as symbols, and it is unclear in a different manner from what these surfaces are arranged.

Applicants traverse this rejection.

Claims 1 and 10 have been amended to replace part e) of claim 1 and the corresponding part of claim 10 with “the immobilized molecules or molecule classes are arranged on the surfaces to form symbols.” Support for the amendment to claims 1 and 10 can be found throughout the specification and in particular at page 11, first paragraph, and page 14, second and third paragraphs.

Withdrawal of this section 112, second paragraph rejection is respectfully requested.

REJECTION UNDER 35 USC 103(a)

At page 3 of the Office Action, the Examiner rejected claims 1-3 , 5-14 and 16-25 under 35 USC 103 as being unpatentable over Brown et al, U.S. Patent 5,160,701 in view of Blatt et al., published U.S. application 2005/0249633. The Examiner alleged that it would have been obvious to one of ordinary skill in the art the time of the invention to arrange the surfaces of

Brown in the coordinate system of Blatt et al., so that at least two different analytes could be simultaneously analyzed using at least two different techniques.

Applicants traverse this rejection. Claims 1-3, 5-14 and 16-25 are not obvious in view of Brown et al. and Blatt et al.

Brown et al. discloses devices useful in solid-phase binding assays to determine the presence or amount of an analyte in a test sample, and methods for using the device. The device comprises a reaction site having procedural controls and an analyte binding area capable of being simultaneously contacted by the sample and reagent used in the performance of the assay. The figures show devices having a single reaction site. Brown et al. mentions that the areas of the reaction site in which the assay takes place can take the form of dots, circles, numbers or crosses.

Blatt et al., published U.S. application 2005/0249633 discloses systems, devices, cartridges and kits for detecting and/or quantifying at least two different analytes using at least two different techniques, in a single sample. The cartridges comprise at least two test sites for the detection or quantification of at least two different analytes, and are configured to use at least two different techniques for the detection or quantification of the at least two different analytes. The cartridges can have multiple test sites, which can be arranged in a grid, as shown in figure 2A. The systems comprise a device, memory, and a processing module. The device comprises a port configured to accept at least a portion of a cartridge, the portion having at least two test site read zones and a light source, and an array detector.

“[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). The Examiner cannot selectively pick and choose from the disclosed parameters without proper motivation as to a particular selection. The mere fact that a reference may be modified to reflect features of the claimed invention does not make the modification, and hence the claimed invention, obvious

unless the prior art suggested the desirability of such modification. *In re Mills*, 916 F.2d 680, 682, 16 USPQ2d 1430 (Fed. Cir. 1990); *In re Fritch*, 23 USPQ2d 1780 (Fed. Cir. 1992).

Moreover, a prior art reference must be considered in its entirety, *i.e.*, as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). And, if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

The Examiner alleged that it would have been obvious to one of ordinary skill in the art the time of the invention to arrange the surfaces of Brown et al. in the coordinate system of Blatt et al., so that at least two different analytes could be simultaneously analyzed using at least two different techniques.

Applicants submit that persons skilled in the art would not be motivated to modify Brown et al. and Blatt et al. in the manner asserted by the Examiner. The devices of Brown et al. comprise a reaction site having procedural controls and an analyte binding area capable of being simultaneously contacted by the sample and reagent used in the performance of the assay. The cartridges of Blatt et al. are configured to use at least two different techniques for the detection of quantification of the at least two analytes. Combining the surfaces of Brown et al. with Blatt et al., in the manner suggested by the Examiner, would result in cartridges wherein the reaction sites are not configured to use at least two different techniques for the detection or quantification of the analyte. Combining the surfaces of Brown et al. with the coordinate system of Blatt et al. would change the manner in which the Blatt et al. cartridge operates, and render it unsatisfactory for its intended purpose. Thus, there can be no suggestion or motivation to make the proposed modification, and claims 1-3, 5-14 and 16-25 are not obvious in view of Brown et al. and Blatt et al.

For at least the reasons discussed above, claims 1-3, 5-14 and 16-25 are not obvious in view of Brown et al. and Blatt et al. Withdrawal of this section 103 rejection is respectfully requested.

REJECTION UNDER 35 USC 103(a)

At page 10 of the Office Action, the Examiner maintained the rejection of claim 15 under 35 USC 103 as being unpatentable over Brown et al, U.S. Patent 5,160,701 in view of Gao et al., published U.S. application 2006/0134804. The Examiner contended that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device of Brown et al. to provide any meaningful symbol for the control and detection areas for the benefit of providing easily read and understandable symbols/results to an untrained user.

Applicants again traverse this rejection. Claim 15 is directed to the method of claim 14 wherein the surfaces are rendered visible as symbols consisting of several circles inside each other having one center dot are rendered visible, the dot appearing only in a positive detection case, and whereby each individual circle only becomes visible above a certain concentration value of the analyte, or a star with which each of the spokes becomes visible above a certain concentration value and, in the positive case, a predefined spoke appears or the individual spokes detect the presence of several analytes and one spoke appears above a certain concentration value or a combination of these symbols.

Brown et al., as discussed above, discloses devices useful in solid-phase binding assays to determine the presence or amount of an analyte in a test sample, and methods for using the device. The device comprises a reaction site having procedural controls and an analyte binding area capable of being simultaneously contacted by the sample and reagent used in the performance of the assay. The figures show devices having a single reaction site. Brown et al. mentions that the areas of the reaction site in which the assay takes place can take the form of dots, circles, numbers or crosses.

Gao et al. discloses a test device for detecting the presence of an analyte in a liquid sample and indicating to the user the presence or absence of the analyte with recognizable symbols, which can be a plus sign, a minus sign, letter from the alphabet, a number or other symbol.

Applicants again submit that claim 15 is not obvious in view of the combined teachings of Brown et al. and Gao et al. The combined teachings of the cited references do not teach or suggest the arrangement of symbols recited in claim 15. There is no suggestion of symbols consisting of several circles inside each other having one center dot are rendered visible, the dot appearing only in a positive detection case, and whereby each individual circle only becomes visible above a certain concentration value of the analyte. Further there is no suggestion of a star configuration in which each of the spokes becomes visible above a certain concentration value and, in the positive case, a predefined spoke appears or the individual spokes detect the presence of several analytes and one spoke appears above a certain concentration value. Especially, there is no disclosure or suggestion of groups of symbols wherein some of the symbols are rendered visible above a certain concentration value of the analyte, as recited in claim 15.

Additionally, the method of claim 10, from which claims 14 and 15 depend, is not obvious over the combined teachings of the cited references. The combined teachings of the Brown et al. and Gao et al. do not disclose or suggest the method of claim 10, or the device recited in claim 10 wherein the surfaces with immobilized molecules or molecule classes provided on a panel of the device are arranged in a matrix or coordinate system, and the immobilized molecules or molecule classes are arranged on the surfaces to form symbols, and therefore do not render obvious claim 15 which depends from claim 10.

Claim 15 is not obvious in view of the combined teachings of Brown et al. and Gao et al. Withdrawal of this section 103 rejection is again respectfully requested.

In view of the above, Applicants believe the pending application is in condition for allowance. Reconsideration of the application is respectfully requested and an early Notice of Allowance is earnestly solicited.

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 03-2775, under Order No. 14519-00001-US.

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Respectfully submitted,

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